

THE CLAIMS

1. (Original) An encoding controlling apparatus comprising:

offset holding means for holding an offset equivalent to a time period by which to start encoding an audio signal earlier than a video signal upon recording of a chapter;

recording mode determining means for determining whether a seamless connection is possible between the preceding chapter and the following chapter in order to set an initial value of said offset depending on an outcome of the determination;

offset updating means for updating said offset in keeping with progress in encoding said video signal and said audio signal; and

recording controlling means for giving an instruction either to start or to stop the encoding of said video signal and said audio signal in accordance with said offset.

2. (Original) An encoding controlling apparatus according to claim 1, wherein, upon start of the recording, said recording controlling means starts encoding said audio signal earlier than said video signal by said time period equivalent to said offset; and upon end of the recording, said recording controlling means stops the encoding after ending the encoding of each of record units constituting said video signal and said audio signal.

3. (Original) An encoding controlling apparatus according to claim 1, wherein, if said seamless connection is found possible, then said recording mode determining means regards as the initial value of said offset the value of said offset updated in said preceding chapter; and if said seamless connection is found impossible, then said recording mode determining means regards zero as the initial value of said offset.

4. (Original) An encoding controlling apparatus according to claim 1, further comprising fading controlling means for controlling a volume of said audio signal in accordance with an instruction either to start or to stop said audio signal.

5. (Original) An encoding controlling apparatus according to claim 4, wherein said fading controlling means controls the volume of said audio signal so as to fade in said audio signal starting from a mute state upon start of the recording, and to fade out said audio signal upon end of the recording.

6. (Original) An encoding system comprising:

video encoding means for encoding a video signal;

audio encoding means for encoding an audio signal;

offset holding means for holding an offset equivalent to a time period by which to start encoding said audio signal earlier than said video signal upon recording of a chapter;

recording mode determining means for determining whether a seamless connection is possible between the preceding chapter and the following chapter in order to set an initial value of said offset depending on an outcome of the determination;

offset updating means for updating said offset in keeping with progress in the encoding of said video signal and said audio signal performed by said video encoding means and said audio encoding means respectively;

recording controlling means for giving an instruction either to start or to stop the encoding of said video signal and said audio signal in accordance with said offset; and

multiplexing means for multiplexing the encoded video signal and the encoded audio signal output by said video encoding means and said audio encoding means respectively.

7. (Original) An encoding controlling method for use with an encoding controlling apparatus having offset holding means for holding an offset equivalent to a time period by which to start encoding an audio signal earlier than a video signal upon recording of a chapter, said encoding controlling method comprising the steps of:

determining whether a seamless connection is possible between the preceding chapter and the following chapter;

if said seamless connection is found possible, then regarding as an initial value of said offset the value of said offset updated in said preceding chapter;

if said seamless connection is found impossible, then regarding zero as the initial value of said offset;

starting to encode said audio signal;

starting to encode said video signal upon elapse of said time period equivalent to said offset after the encoding of said audio signal is started; and

given an instruction to stop the recording, stopping the encoding after ending the encoding of each of record units constituting said video signal and said audio signal.

8. (Original) An encoding controlling method for use with an encoding controlling apparatus having offset holding means for holding an offset equivalent to a time period by which to start encoding an audio signal earlier than a video signal upon recording of a chapter, said encoding controlling method comprising the steps of:

determining whether a seamless connection is possible between the preceding chapter and the following chapter;

if said seamless connection is found possible, then regarding as an initial value of said offset the value of said offset updated in said preceding chapter;

if said seamless connection is found impossible, then regarding zero as the initial value of said offset;

starting to encode said audio signal;

starting to encode said video signal upon elapse of said time period equivalent to said offset after the encoding of said audio signal is started;

controlling a volume of said audio signal so as to fade in a first record unit of said audio signal starting from a mute state after the encoding of said audio signal is started;

given an instruction to stop the recording, stopping the encoding after ending the encoding of each of record units constituting said video signal and said audio signal; and

controlling the volume of said audio signal so as to fade out the last record unit of said audio signal of which the encoding is stopped.

9. (Previously presented) A computer program product in an encoding controlling apparatus having offset holding means for holding an offset equivalent to a time period by which to start encoding an audio signal earlier than a video signal upon recording of a chapter, said computer program product stored on a computer readable medium and including program code for performing the steps of:

determining whether a seamless connection is possible between the preceding chapter and the following chapter;

if said seamless connection is found possible, then regarding as an initial value of said offset the value of said offset updated in said preceding chapter;

if said seamless connection is found impossible, then regarding zero as the initial value of said offset;

starting to encode said audio signal;

starting to encode said video signal upon elapse of said time period equivalent to said offset after the encoding of said audio signal is started; and

given an instruction to stop the recording, stopping the encoding after ending the encoding of each of record units constituting said video signal and said audio signal.

10. (Previously presented) A computer program product in an encoding controlling apparatus having offset holding means for holding an offset equivalent to a time period by which to start encoding an audio signal earlier than a video signal upon recording of a chapter, said computer program product stored on a computer readable medium and including program code for performing the steps of:

determining whether a seamless connection is possible between the preceding chapter and the following chapter;

if said seamless connection is found possible, then regarding as an initial value of said offset the value of said offset updated in said preceding chapter;

if said seamless connection is found impossible, then regarding zero as the initial value of said offset;

starting to encode said audio signal;

starting to encode said video signal upon elapse of said time period equivalent to said offset after the encoding of said audio signal is started;

controlling a volume of said audio signal so as to fade in a first record unit of said audio signal starting from a mute state after the encoding of said audio signal is started;

given an instruction to stop the recording, stopping the encoding after ending the encoding of each of record units constituting said video signal and said audio signal; and

controlling the volume of said audio signal so as to fade out the last record unit of said audio signal of which the encoding is stopped.